

Quartz glass component for a reactor housing a method of manufacturing same and use thereof



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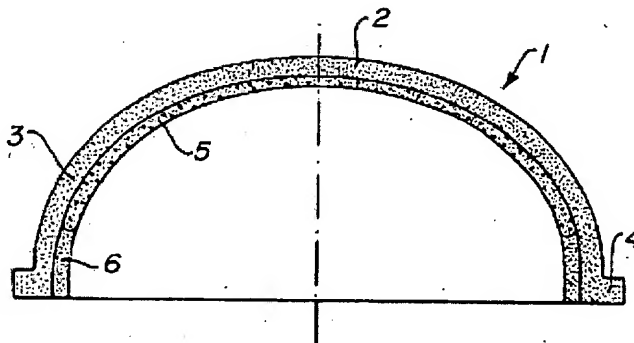
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Abstract not available for JP2001516327T

Abstract of corresponding document: **US6306489**

A quartz glass component for a reactor chamber, especially of a plasma etching device, comprises a substrate of a first quartz glass quality with an inner surface having an average roughness depth Ra of more than 1 μm , facing the inside of the reactor. To minimize particles in the reactor chamber, and to give the inner surface high adhesiveness for layers deposited on it and a long service life, a roughness zone is formed on the substrate by an open pore bubble layer made of a second quartz glass quality. The quartz glass component may be made by forming a blank from a granulate containing SiO_2 , and partial or complete vitrification of the blank by heating to a temperature above 1,000 DEG C. During the forming of the inner surface of the blank, an additional constituent is added to the granulate containing SiO_2 in a roughness zone. The additional constituent reacts during the vitrification to release a gas, which forms a bubble layer during vitrification of the roughness zone.



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